

HALIFAX

P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 11.1

Halifax Regional Council

January 26, 2016

February 23, 2016

TO:

Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY:

Original signed

Councillor Steve Craig, Chair, North West Community Council

DATE:

January 12, 2016

SUBJECT:

Case No. 20150- Amendment to the River-lakes Secondary Plan under the Planning Districts 14 and 17 MPS to allow the use of a wider range of techniques to reduce phosphorus emissions

ORIGIN

January 11, 2016 Meeting of North West Community Council, Item No. 13.1.1.

LEGISLATIVE AUTHORITY

Section 25(c) of the Halifax Regional Municipality Charter sets out the powers and duties of Community Council to include "recommending to the Council appropriate by-laws, regulations, controls and development standards for the community."

RECOMMENDATION

It is recommended by North West Community Council recommend that Halifax Regional Council:

1. Give First Reading to consider proposed amendments to the River-lakes Secondary Plan under the Planning Districts 14 and 17 Municipal Planning Strategy as set out in Attachment A of the staff report dated December 11, 2015; and schedule a public hearing; and
2. Approve the proposed amendments to the River-lakes Secondary Plan under Planning Districts 14 and 17 Municipal Planning Strategy as set out in Attachment A of the staff report dated December 11, 2015.

BACKGROUND

A staff report dated January 12, 2016 pertaining to amendment to the River-lakes Secondary Plan under the Planning Districts 14 and 17 Municipal Planning Strategy to allow the use of a wider range of techniques to reduce phosphorus emissions was before North West Community Council for consideration at its January 11, 2016 meeting.

For further information please refer to the attached staff report dated December 11, 2015.

DISCUSSION

North West Community Council reviewed this matter at its meeting held on January 11, 2016 and forwarded the recommendation to Halifax Regional Council as contained in this report.

FINANCIAL IMPLICATIONS

As outlined in the attached staff report dated December 11, 2016.

COMMUNITY ENGAGEMENT

All meetings of North West Community Council are open to the public. The agenda and reports are provided online in advance of the meeting.

ENVIRONMENTAL IMPLICATIONS

As outlined in the attached staff report dated December 11, 2016.

ALTERNATIVES

North West Community Council did not discuss alternatives.

ATTACHMENTS

1. Staff report dated December 11, 2015.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Liam MacSween, Legislative Assistant, 902.490.6521

HALIFAX

P.O. Box 1749
Halifax, Nova Scotia
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Attachment 1
North West Community Council
January 11, 2016

TO: Chair and Members of Halifax and West Community Council

Original Signed

SUBMITTED BY:

Bob Bjerke, Chief Planner and Director, Planning & Development

DATE: December 11, 2015

SUBJECT: **Case Number 20150- Amendment to the River-lakes Secondary Plan under the Planning Districts 14 and 17 MPS to allow the use of a wider range of techniques to reduce phosphorus emissions**

ORIGIN

Regional Council initiated the process to consider amending this Plan at the request of Planning and Development on September 8, 2015.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter (HRM Charter), Part VIII, Planning and Development enables HRM to create and amend Municipal Planning Strategies.

Section 235 Subsection (5)(j) of the HRM Charter specifies "Where a municipal planning strategy so provides, a land-use by-law may . . . "set out conditions, including performance standards, to be met by a development before a development permit may be issued"

Section 235 Subsection (5)(l) of the HRM Charter specifies "Where a municipal planning strategy so provides, a land-use by-law may . . . "prescribe methods for controlling erosion and sedimentation during the construction of a development"

Section 242 Subsection (1)(a) of the HRM Charter specifies "A development agreement may contain terms with respect to matters that a land-use by-law may contain"

Section 242 Subsection (1)(f) of the HRM Charter specifies "A development agreement may contain terms with respect to . . . provision for the disposal of storm and surface water".

RECOMMENDATIONS

It is recommended that the North West Community Council recommend that Halifax Regional Council:

1. Give First Reading to consider proposed amendments to the River-lakes Secondary Plan under the Planning Districts 14 and 17 Municipal Planning Strategy as set out in Attachment A of this report; and schedule a public hearing; and
2. Approve the proposed amendments to the River-lakes Secondary Plan under Planning Districts 14 and 17 Municipal Planning Strategy as set out in Attachment A.

BACKGROUND

Council adopted a no-net phosphorus loading policy under the River-lakes Secondary Planning Strategy of the Municipal Planning Strategy for Planning Districts 14 and 17, in 2012. The intent of the policy is to protect the Shubenacadie Lakes from further deterioration by controlling the amount of phosphorus emitted into the receiving waters from large scale development.

Phosphorus is a chemical constituent that naturally occurs in the environment and from human activities such as the application of fertilizers and human waste. Phosphorus can become bound up in soils, vegetation and rocks if it does not exceed the natural capacity of the environment to absorb it. An abundance of phosphorus can be released from land development activity which can cause a lake to become eutrophic long before its natural time.¹

To stem the decline of the Shubenacadie Lakes, Policy RL-22 requires a study to verify that there will be no net increase in phosphorus emissions from a large scale housing development or a commercial development after a proposed development takes place (Attachment B- Policy RL-22). If the study shows that there will be a net increase in phosphorus in the post development situation, the proponent can either reduce the phosphorus by retaining the stormwater on the site to remove phosphorus naturally and/or reduce the proposed density of proposed development.

The stipulation that phosphorus has to be treated naturally is predicted to pose a problem for future commercial and residential development regulated through Policy RL-22. The Sobeys Site for example, located at 3286 Highway 2, is primarily covered with asphalt which will make it difficult, if not impossible, to remove phosphorus naturally. A stormceptor, or similar engineering device designed to remove phosphorus, oils, and debris from stormwater will be needed to treat phosphorus on this site and this type of device is not considered to be a natural method of stormwater treatment pursuant to Policy RL-22. There may also be a need to set the development back from receiving watercourses or to use innovative design techniques to abate phosphorus levels.

The requirement to treat stormwater naturally was developed in response to concerns by Halifax Water that it would require the Utility to have to treat stormwater in the system of public ditches. Halifax Water has no current requirement to treat stormwater and such a requirement would have imposed an additional cost to its operations which it cannot authorize without approvals from the Utility and Review Board. Policy RL-22 was therefore, drafted to require that the stormwater be retained and treated naturally on-site as a means of avoiding impact on the Halifax Water stormwater management operations.

Since the adoption of the policy, HRM Staff have been advised by consultants that the only way a no-net phosphorus post development condition can be achieved is through the use of advanced stormwater treatment systems in addition to other design controls such as lakeshore setbacks and density reductions. An amendment to Policy RL-22 is therefore, needed to allow a wider range of measures to maintain phosphorus at pre-development levels.

DISCUSSION

The process of eutrophication is naturally occurring and typically takes thousands of years to complete. In a developed watershed, a lake can become eutrophic in a few decades. One of the key contributors to an accelerated rate of eutrophication, known as cultural eutrophication, is the abundant release of phosphorus to receiving waterbodies at an unsustainable rate.

¹ The process of eutrophication is naturally occurring and typically takes thousands of years to complete. In a developed watershed, a lake can become eutrophic in a few decades. One of the key contributors to an accelerated rate of eutrophication, known as cultural eutrophication, is the abundant release of phosphorus to receiving waterbodies at an unsustainable rate.

Developments that require studies to verify a no-net phosphorus increase include any proposed development agreement for commercial development in the Village Core Comprehensive Development District or the Canal Court (Attachment C). A study is also required for any residential subdivision developments that may be considered through the provisions of a development agreement as a Conservation Design Development within the River-lakes Secondary Plan pursuant to Policy RL-22.

Amending Policy RL-22 to allow a wider range of measures is needed to achieve the no-net phosphorus goal of this Policy. In addition to controls on density, other measures such as the ability to use advanced stormwater management controls, setbacks from watercourses, etc., may be needed to abate phosphorus emissions. Thus the Policy should be less prescriptive in order to allow the development of a wider range of phosphorus abatement techniques and to allow the future application of phosphorus abatement techniques that may be developed overtime.

Halifax Water has advised that it has no objection to the placement of stormwater management devices on private property to achieve the goals of the River-lakes Secondary Plan. It does not, however, have a regulatory requirement to manage the quality of stormwater and is not able to allocate operational or capital funds to this initiative.

The proposed amendments to Policy RL-22, as outlined in Attachment A, would allow the site designer to propose a wider range of methods to abate phosphorus emissions. The Policy does not specify which particular technique has to be used to abate phosphorus other than the requirement that any stormwater treatment devices be developed on private property. This is intended to give the site-designer flexibility to use a wider range of phosphorus abatement techniques while preventing the imposition of any additional regulatory obligations on the Public Utility.

It is recommended that the North West Community Council recommend that Regional Council hold a public hearing to consider adopting the amendment to the River-lakes as set out in Attachment A.

FINANCIAL IMPLICATIONS

The HRM costs associated with processing these planning amendments can be accommodated within the 2015/16 operating budget for C310 Planning & Applications. The revised, less-prescriptive policy is not expected to impact the time required for staff review, so the proposed amendments can be accommodated within existing resources.

COMMUNITY ENGAGEMENT

The community engagement process is consistent with the intent of the HRM Community Engagement Strategy. A Public Information Meeting was held on October 21, 2015 to obtain feedback on the proposed (Attachment D). Notices of the Public Information Meeting were posted on the HRM website and the Herald Chronicle on October 10, 2015.

Prior to considering the approval of any RMPS amendments, Regional Council must hold a public hearing. Should Regional Council decide to proceed with a public hearing on this application. Notification of the public hearing will have to be published in the Chronical Herald for two consecutive weeks prior to the hearing. The HRM website will also be updated to indicate notice of the public hearing.

ENVIRONMENTAL IMPLICATIONS

The revisions to the policy will enable site designers to come up with a wider range of innovative solutions to control phosphorus emissions which will reduce impacts on the natural environment and the receiving lakes.

ALTERNATIVES

Regional Council may choose to reject the recommended amendment to the River-lakes Secondary Plan under the Planning District 14 and 17 Municipal Planning Strategy as contained in Attachment A. Regional Council is under no obligation to consider a request to amend its MPS and a decision not to amend the MPS cannot be appealed.

ATTACHMENTS

Attachment A - By-law to amend the River-lakes Secondary Plan under the Planning Districts 14 and 17 Municipal Planning Strategy

Attachment B - Excerpt of the existing Policy RL-22 from the River-lakes Secondary Plan

Attachment C - Map showing the location of the Village Core Comprehensive Development District and the Canal Court zones

Attachment D - Minutes of the Public Information Meeting held on October 21, 2015.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendas/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Maureen Ryan, Senior Planner, 902-490-4799

Original Signed

Report Approved by:

Carl Purvis, Supervisor, Regional and Community Planning, 902-490-4797

Attachment A

BE IT ENACTED by the Council of the Halifax Regional Municipality that the River-lakes Secondary Plan under the Municipal Planning Strategy for Planning District 14 and 17 on the 2nd day of May 1989, A. D. and approved with amendments by the Minister of Municipal Affairs on the 19th day of July, 1989, which includes all amendments thereto which have been adopted by the Halifax Regional Municipality and are in effect as of the 18th day of October, 2014 hereby further amended as follows:

1. Amending Policy RL-22 by deleting text shown as strikeout and inserting text shown as bold, as follows:

RL-22 The River-lakes Secondary Planning Strategy shall establish a no net increase in phosphorus as the performance standard for all large scale developments considered through the provisions of a development agreement pursuant to policies RL-4, RL-5, RL-11, RL-12, RL-13, RL-14 and RL-15 of this Secondary Plan. This Policy shall also apply to proposed developments pursuant to policies S-15 and S-16 of the Regional Municipal Planning Strategy. A study prepared by a qualified person shall be required for any proposed development pursuant to these policies to determine if the proposed development will export any greater amount of phosphorus from the subject land area during or after the construction of the proposed development than the amount of phosphorus determined to be leaving the site prior to the development taking place. If the study reveals that the phosphorus levels predicted to be exported from the proposed development exceed the phosphorus levels currently exported from the site, then the proposed development will not be permitted to take place unless there are reductions in density or ~~treatment of stormwater through natural systems~~ other methods that reduce phosphorus export levels to those current before the proposed development. **Any stormwater management devices designed to treat phosphorus must be located on the privately-owned land included in the proposed development agreement.** The cost of the study shall be borne by the applicant. The study may rely on phosphorus export coefficients derived from existing studies if they can be justified for application to local environmental conditions. All existing and proposed development within the affected area shall be taken into account and the consultant shall undertake Wet Areas Mapping to help define the ecological boundaries associated with the flow channels, accumulation points, and riparian zones to restrict any high impact development in those areas.

I HEREBY CERTIFY that the amendments to the Districts 14 and 17 Municipal Planning Strategy as set out above, were passed by a majority vote of the Halifax Regional Council held on the _____ day of _____, 2015.

GIVEN under the hand of the Municipal Clerk and under the Corporate Seal of the Halifax Regional Municipality this _____ day of _____, 2015.

Cathy Mellet
Municipal Clerk

Attachment B

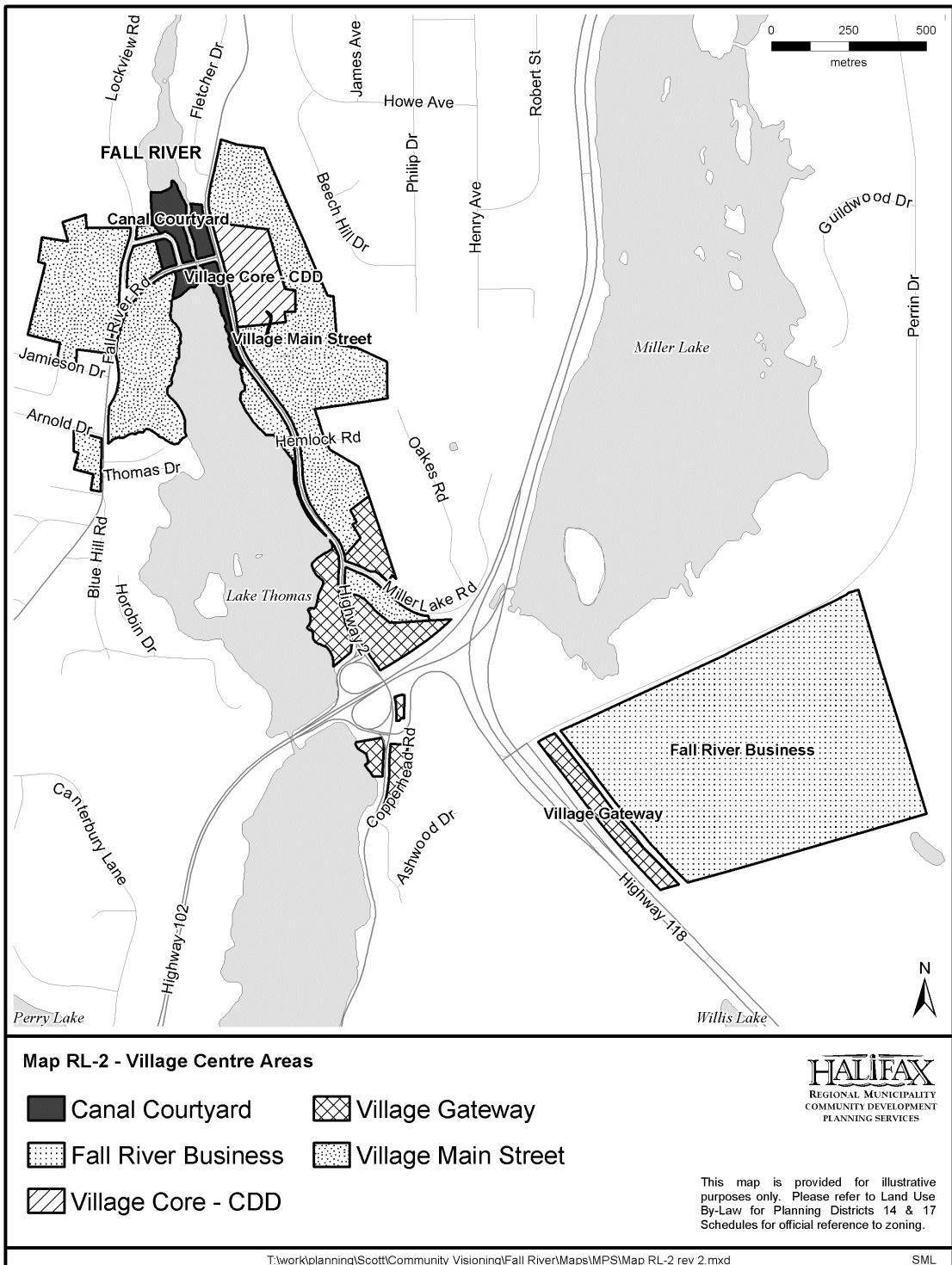
Excerpt from the River-lakes Secondary Planning Strategy contained under the Municipal Planning Strategy for Planning Districts 14 and 17

In order to maintain the health and resilience of these receiving waters, this Secondary Planning Strategy will establish a no net increase phosphorus export policy for any future residential developments exceeding 8 units/ lots within the River Lakes Secondary Planning Strategy Area. Pursuant to the Regional Plan, any development requiring a new road for the development of more than 8 lots is only allowed to proceed under the provisions of a development agreement. As part of the assessment process for a development agreement, applicants shall be required to submit a study by a qualified person demonstrating that the proposed development will not export any more phosphorus from the site than what may be exported from the site prior to the development taking place. The total amount of phosphorus that is expected to be exported from the site prior to the undertaking of a development shall in effect become the phosphorus budget or limit for the amount of phosphorus that may be allowed to be exported from the site under the proposed development for that area. If the amount of phosphorus for a proposed development exceeds the phosphorus budget for the site, then the density of development will have to be adjusted to reduce the phosphorus impacts on the receiving environment. The feasibility of continuing development in the northern portion of the Secondary Planning Strategy Area should be reviewed during the Phase II planning process.

In order to achieve an appropriate balance of development throughout the Shubenacadie Lakes System and to maintain an oligotrophic level for Grand Lake, water quality objectives should be established for each contributing sub-watershed after HRM adopts a water quality monitoring functional plan. HRM is currently undertaking a watershed study of the Shubenacadie Lakes Watershed to assess the impacts of potential future development in the Port Wallis area within the Lake Charles Sub-watershed. It would be appropriate to review the River-lakes Secondary Planning Strategy when setting targets for future growth in the Lake Charles or Lake William sub-watersheds that are upstream from Fall River. At this time, threshold values should be set for the Shubenacadie Lakes System against which to regulate the density of all future development.

- RL-22 The River-lakes Secondary Planning Strategy shall establish a no net increase in phosphorus as the performance standard for all large scale developments considered through the provisions of a development agreement pursuant to policies RL-4, RL-5, RL-11, RL-12, RL-13, RL-14 and RL-15 of this Secondary Plan. This Policy shall also apply to proposed developments pursuant to policies S-15 and S-16 of the Regional Municipal Planning Strategy. A study prepared by a qualified person shall be required for any proposed development pursuant to these policies to determine if the proposed development will export any greater amount of phosphorus from the subject land area during or after the construction of the proposed development than the amount of phosphorus determined to be leaving the site prior to the development taking place. If the study reveals that the phosphorus levels predicted to be exported from the proposed development exceed the phosphorus levels currently exported from the site, then the proposed development will not be permitted to take place unless there are reductions in density or treatment of stormwater through natural systems to reduce phosphorus export levels to those current before the proposed development. The cost of the study shall be borne by the applicant. The study may rely on phosphorus export coefficients derived from existing studies if they can be justified for application to local environmental conditions. All existing and proposed development within the affected area shall be taken into account and the consultant shall undertake Wet Areas Mapping to help define the ecological boundaries associated with the flow channels, accumulation points, and riparian zones to restrict any high impact development in those areas.

Attachment C



ATTACHMENT D

**HALIFAX REGIONAL MUNICIPALITY
Public Information Meeting
Case 20150**

Wednesday, October 21, 2015

7:00 p.m.

Ash Lee Jefferson Elementary School

STAFF IN ATTENDANCE:	Maureen Ryan, Senior Planner, HRM Planning and Development Laura Szigatti, Planning Technician, HRM Planning and Development Cara McFarlane, Planning Controller, HRM Development Approvals
ALSO IN ATTENDANCE:	Councillor Barry Dalrymple, District 1
PUBLIC IN ATTENDANCE:	Approximately 8

The meeting commenced at approximately 7:00 p.m.

1. Presentation of Proposal – Maureen Ryan

In 2012, Regional Council adopted the River-lakes Secondary Plan to guide and direct future development throughout the River-lakes / Fall River community in a way that respected the community's Village Centre character. A number of zones and mechanisms were developed to guide future development including large scale residential developments and commercial developments throughout the community.

A key aspect of the plan came from the Regional Plan which stated the need to maintain the trophic status of the lakes. The results of a watershed study showed that in some cases, the lakes have reached the upper range of trophic status; therefore, there is a need to control phosphorus. The Fall River Vision Implementation Committee (VIC) recommended a policy to Regional Council that basically requires a study be done for large scale commercial developments and large residential subdivision developments (those where 60% of the site must maintain perpetuity as open space) through a conservation design approach. On those sites, under the development agreement policy pursuant to Policy RL-22, a submission of a study prepared by a qualified professional is required to verify that the proposed future development of this site will emit no more phosphorus than is currently anticipated to be emitted from the site in its present development state. Policy RL-22 specifies two mechanisms: a) to treat phosphorus naturally on-site; or b) to reduce the density of the development. This applies to four large developments (listed).

Since the adoption of this Policy, consultants have advised staff that the policy is too tight in terms of its confinement to the treatment of phosphorus by natural means. Dr. Rob Jamieson advised that in a greenfield situation the removal of one tree will emit phosphorus. In order to prove through a study that phosphorus can be brought to a neutral level, there has to be another mechanism (advanced stormwater management approach, setbacks from watercourses or setback of septic tanks from watercourses, etc.) to control that situation.

As a result, staff asked Regional Council to initiate this amendment to the River-lakes

Secondary Planning Strategy to allow more flexibility under Policy RL-22 to allow the design engineers or qualified professionals to come up with designs that could theoretically achieve a no-net increase in phosphorus loading from a proposed development site.

Policy RL-22 is very restrictive because Halifax Water (being a cost-neutral organization) had concerns about treating the phosphorus within public ditches within the public system. Halifax Water would have had to propose a rate base increase through the Utility and Review Board in order to regulate that type of activity. The Regional Plan focusses on not allowing deterioration of the lakes. A study was done which showed phosphorus levels to date and the trophic status. HRM staff and VIC proposed that stormwater be retained on-site and treated naturally. Consultants have advised staff that this won't be possible in all situations. Staff will have to allow site designers to come up with proposals to abate phosphorus. For example, septic tanks being located within 300 metres from a receiving lake may be cause of phosphorus leaching into the watercourse. In order to deploy the protocols more flexibly to a site and to innovate in good environmental design, the policy needs to be amended.

Regional Council has initiated a process to amend the Municipal Planning Strategy to enable the use of all types of stormwater management systems for the reduction of phosphorus emissions in large scale residential and commercial developments that may be considered by development agreement. Staff may propose that things like the setback of wastewater treatment systems or septic fields should also be considered.

3. Questions and Comments

Bill Horne, Wellington, Member of Shubenacadie Watershed Environmental Protection Society (SWEPS) – Is there any exceptions from this policy for existing subdivisions? **Ms. Ryan** – A proposed conservation design development within the River-lakes Secondary Plan area or a new phase within an existing development is subject to Policy RL-22.

Jack Eisener, Fall River – What study did 300 metres from a septic system and setback from any watercourse area come from? **Ms. Ryan** – Through consultation with Neil Hutchinson, Environmental Services Limited, 50% of the phosphorus within a septic field is anticipated to migrate to the nearest lakeshore within 25 years of its development if it is within 300 metres of a lake. If the septic field is 300 metres away then the phosphorus is not anticipated to reach the lake. There is some discussion as to whether it is from a tributary stream or the lake itself. This is not a solution specifically to phosphorus abatement but the policy needs to be amended to remove the words "through natural systems" to allow the design engineers to innovate.

Tom Mills, Enfield, Chairman of SWEPS – has no issue with removing the words but eutrophic status will probably be reached as phosphorus continues to leach due to historic septic systems. This is unfair to people who want to develop. Septic pumps and maintaining existing systems should be mandatory.

Anna McCarron, Wellington, Past Chair of SWEPS – Should the wording be "added phosphorus" or is it that the old septic systems are still leaching? **Ms. Ryan** – Technically, it would be added phosphorus (no increase in phosphorus over current levels). It is an incentivized approach for people to remediate the site and to do different things with the site to achieve no increase over current levels through advanced stormwater management systems, etc.

Bill Horne, Wellington, Member of SWEPS – How inclusive is this program? Does it go down as far as Lake Charles? Why are the residents of Fall River responsible? **Ms. Ryan** – Lake Charles is not included. This Policy only applies to the River-lakes Secondary Plan which was

the only area we could have applied it under the previous visioning program. Lake Charles is facing future anticipated development Port Wallace Secondary Plan. A watershed study has been undertaken and Regional Council has agreed with staff's recommendation and the Watershed Advisory Board to allow for advanced stormwater management controls in the case of the future Port Wallace Secondary Plan when it is developed. Also a land suitability assessment is being done. Not a tree will be removed off of that site until the areas that are most suitable for development from an environmentally cultural perspective are found as well as from the perspective of abating or preventing impacts on the receiving orders. **Mr. Horne** – Will that stop development? **Ms. Ryan** – No, the developer is being very responsible and cooperative. **Mr. Horne** – Do you require 60% coverage left natural? **Ms. Ryan** – Not in that case, it is a secondary plan. Substantial portions of the site are showing up in the land suitability assessment as areas worthy of preservation.

Michael Creighton, Fall River – Didn't the VIC recommend to Halifax Water to apply a wastewater management district? **Mr. Mills** – Environmental sustainability was a recommendation by the Halifax Watershed Advisory Board as well. **Ms. Ryan** - All of the watershed studies that have been done in the area have recommended the application of that approach and the Regional Plan of 2006 and again in 2014 recommend the consideration of a wastewater management district approach for abating pollution problems within an area, particularly a secondary plan area like the River-lakes plan.

Chris Macaulay, Fall River – Are you amending the policy by removing the words "through natural systems"? **Ms. Ryan** – Those words have to be deleted and another statement may have to be added (in density or treatment of stormwater or other innovative mechanisms to reduce phosphorus export levels) to the current policy. **Mr. Macaulay** - With respect to the 300 metres setback for a septic system, less than 50% of phosphorus is expected to get into the water system. If the perimeter of a piece of property is well within the 300 metre, is using these other systems going to allow people to develop their properties? **Ms. Ryan** – That won't be specified in policy. **Mr. Macaulay** – Therefore, engineers need to provide evidence that phosphorus can be abated to a neutral level. **Ms. Ryan** – Yes. A map of the area was shown indicating the 300 metre buffer from watercourses. A lot of parcels have already been developed with a few exceptions. Expertise, Dr. Dennis Gregor and Neil Hutchinson, suggested mechanisms such as advanced stormwater management and appropriate stormwater management plans, erosion and sedimentation control and setback of septic tanks from the lakes.

Mr. Mills – The policy states no net increase of phosphorus. Is it from that specific development parcel? That specific parcel may have some background phosphorus now. **Ms. Ryan** – It would be no net increase from that parcel. **Mr. Mills** – What about an add-on to an existing development? **Ms. Ryan** – It all comes down to the area for which the development agreement applies. It is about incentivizing and trading off. The policy should provide some flexibility to accomplish that.

Ms. McCarron – The person who was involved in the watershed studies for the River-lakes area is a proponent of alternative methods of septic systems. Ms. McCarron believes alternative methods for capturing septic waste was included as part of the study. The person asked if the community would be receptive to composting toilets. Maybe it is time for developers to find different ways to treat septic waste so that it is not adding phosphorus to the system. **Ms. Ryan** – HRM has no control under the development agreement as to what type of septic system is used but looking at alternatives and communal wastewater management systems that give the ability to treat phosphorus would be highly effective. She was also advised by the consultants that the Waterloo Biofilter System is a highly effective approach for removing phosphorus. Raised bed technology and artificial wetlands are highly effective means of treating phosphorus.

Mr. Horne – What about industrial waste and septic systems from around the airport that come through the River-lakes system? Are they going to be monitored and is there a plan to remove those phosphates? **Ms. Ryan** – Unfortunately, she's not able to answer that question. **Mr. Horne** – suggested the question be asked. How will air particulates be monitored? **Ms. Ryan** – They are not being monitored but developers are required to produce a phosphorus expert coefficient study before proceeding with development. There are alternative approaches such as the lakeshore carrying capacity approach where phosphorus is abated through a variety of means throughout the entirety of the watershed. It is a huge undertaking and it requires environmental monitoring. **Mr. Horne** – Suggested Ms. Ryan talk to the consultants. Also, acid rain has a tendency to drop the PH in the soils which then could release more phosphorus. The soils in the Fall River area tend to be more on the acidic side.

Mr. Mills – In reference to the airport particulates, DOE does not share their information very freely. In 2013/14 SWEPS undertook field surveys, in conjunction with Halifax Water, on Johnson Brook where it goes into Soldiers Lake draining from the wastewater treatment plant. DOE requires Halifax Water to test all of the water leaving the treatment plant. Representatives from Halifax Water will be meeting with SWEPS on November 4 at the Gordon Snow Community Centre to give a presentation on an upgrade to the treatment plant.

Ms. Ryan – What are your thoughts on this idea of relaxing the policy to allow for innovation in environmental design to abate phosphorus? **Councillor Dalrymple** – is in favour of deleting the words “through natural systems” from the policy. These words were meant to protect the wishes of the community and the VIC to keep phosphorus out of the lakes but it poses issues for developments. He is in favor of whatever mechanism is used by developers to keep the phosphorus out of the lakes. **Ms. Ryan** – To add greater flexibility and allow opportunity for innovation and design, she may recommend adding some words to the policy.

Mr. Horne – Phosphates and total phosphorus are made up of inorganic and organic types of phosphorus. Some are more toxic than others and don't break down as easily. Consultants should understand what these are before devising a plan. **Ms. Ryan** – Total phosphorus is what is being referred to here in this case. Accumulation over an average of three years has been the recommendation all along from AECOM and Hutchinson Environment as the means of curtailing the deterioration of the lakes with respect to phosphorus loading. **Mr. Horne** – These things should be explained. **Ms. Ryan** – will consult with them.

Mr. Horne – Is this a way of development reduction in the Fall River area so people will move into the city or is it about the environment? **Ms. Ryan** – It is about managing the impacts of development on the environment. It is not intended to stop people from moving here.

Ms. Ryan thanked Mr. Eisener for his commentary before the meeting on pervious surfaces and ways and means of achieving that objective.

4. Planning Process – Maureen Ryan

Staff will propose a revision to Policy RL-22 and bring it before North West Community Council who will give a recommendation to Regional Council.

5. Closing Comments

Ms. Ryan thanked everyone for coming and expressing their comments.

6. Adjournment

The meeting adjourned at approximately 7:46 p.m.